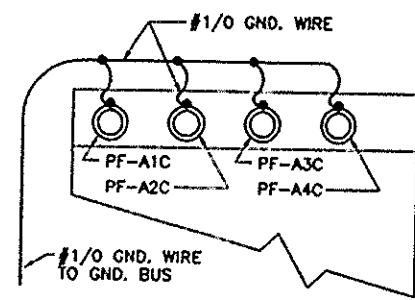


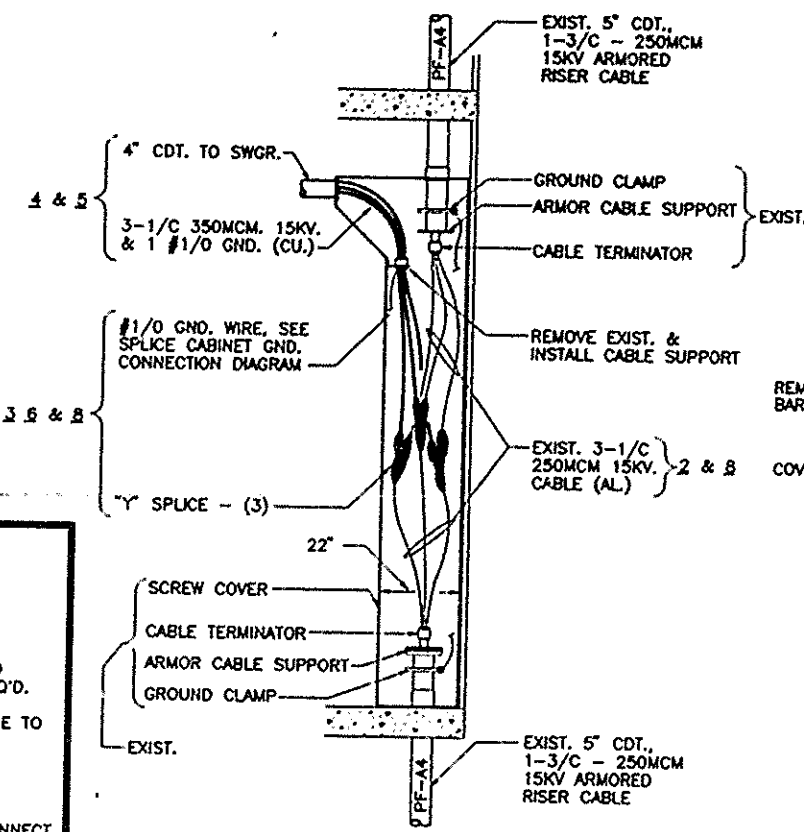
SPICE CABINET GROUND CONNECTION DIAGRAM
TYPICAL FOR STEP 3 & 5
NOT TO SCALE



SECTION A-A

STEPS REQUIRED FOR 15KV FEEDER INSTALLATION

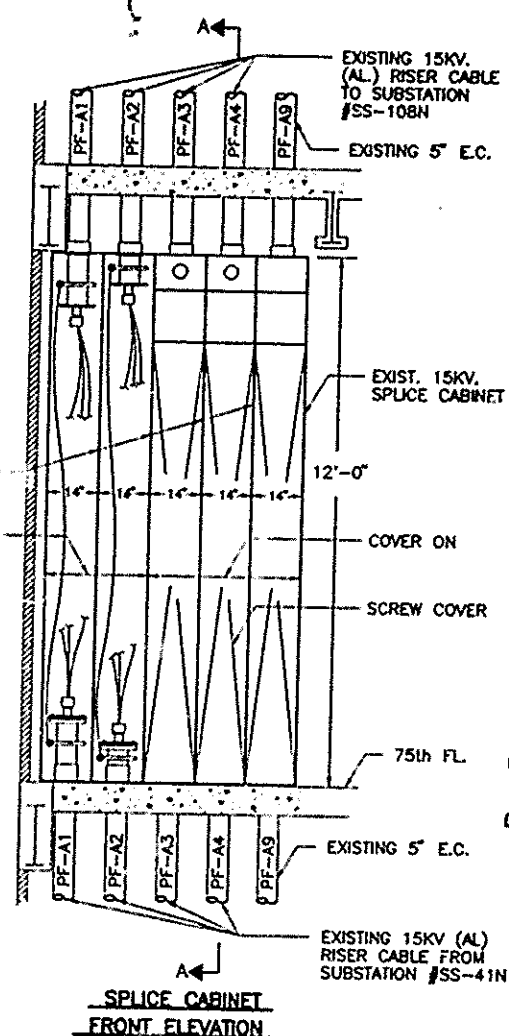
1. - DE-ENERGIZE FEEDER.
2. - REMOVE EXIST. ARCPROOFING.
3. - BREAK EXIST. SPLICES (3) AND DISCONNECT GND. WIRE AS REQ'D.
4. - REMOVE EXIST. CONDUIT & WIRE TO 1500KVA TRANSF. SWITCH.
5. - INSTALL CONDUIT & WIRE TO 2000KVA TRANSF. BKR. HV-B.
6. - RE-MAKE SPLICES (3) AND CONNECT GND WIRING AS SHOWN. (REMOVE BARRIER IF REQ'D.)
7. - MAKE CONNECTIONS AT 2000KVA TRANSF. BKR. HV-B.
8. - INSTALL ARCPROOFING.
9. - TEST FEEDER AND RE-ENERGIZE.



SECTION A-A

NOTE: PF-A1, A2, & A3 ARE TYPICAL

DETAIL "A"
15KV. SPICE CABINET
SCALE IN FEET
0 1 2 3 4 5



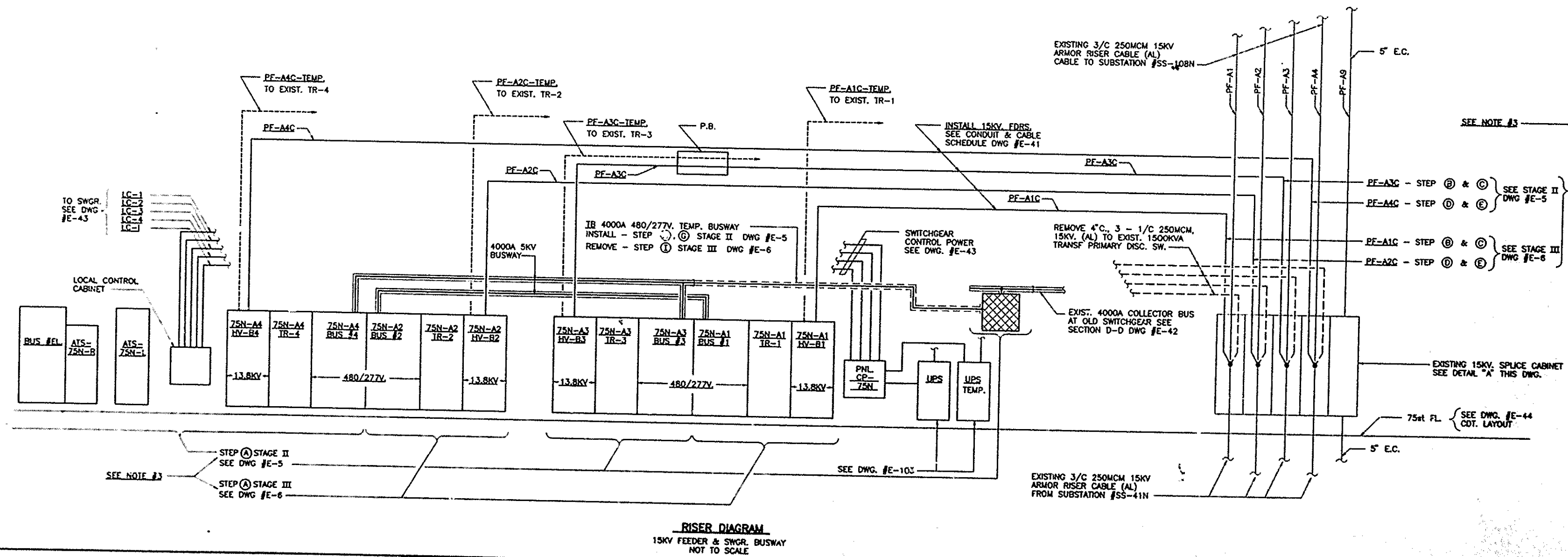
SPICE CABINET FRONT ELEVATION

NOTES

- 1.- FOR LEGEND SEE DWG. E-1, FOR GENERAL NOTES, ABBREVIATIONS AND LIGHTING FIXTURE SCHEDULE SEE DWG. E-2.
- 2.- FOR CONSTRUCTION STAGING SEE DWG. #CS-1.
- 3.- FOR WORK PERFORMED ON SUBSTATION SS-75N IN STAGE II & III SEE THE FOLLOWING DRAWINGS:
 - STAGE II ONLY
DWG #E-5 - TYPICAL SUBSTATION
DWG #E-46 - LOAD TRANSFER
 - STAGE III ONLY
DWG #E-6 - TYPICAL SUBSTATION
DWG #E-46 & 47 - LOAD TRANSFER
 - COMBINED STAGE II & III
DWG #E-39 (THIS DWG) SWGR. EQUIP.
DWG #E-40 - 480V ONE LINE DIAGRAM
DWG #E-41 - CDT. & CABLE SCHED.
DWG #E-42 - SWGR. EQUIP. PLAN
DWG #E-43 - 75th FL CTRL. CDT
DWG #E-44 - 75th FL CDT LAYOUT
DWG #E-45 - 75th FL CDT LAYOUT

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF ONE OF THE CONTRACT DRAWINGS CONSTITUTING A PART OF CONTRACT NO. WTC-802.071 IN THE FORM IN WHICH SAID DRAWINGS EXISTED AT THE TIME THE SAID CONTRACT WAS EXECUTED BY THE PARTIES.

DATE 6/21/95 *Sam Han A. Alkawas* SPEC. WRITER
DATE 8/15/95 *Peter K. Swernay* ENGINEER OF DESIGN



RISER DIAGRAM
15KV FEEDER & SWGR. BUSWAY
NOT TO SCALE

THE PORT AUTHORITY OF NY & NJ

Peter K. Swernay
ENGINEERING PROGRAM MANAGER
WORLD TRADE CENTER
CHIEF ELECTRICAL ENGINEER

Engineering Department
Design Divisions
The World Trade Center
Electrical/HVAC
Upgrade Program

Title
TOWER ONE AND TWO LOW VOLTAGE SUBSTATIONS CONSTRUCTION AND INSTALLATION

ELECTRICAL
SUBSTATION SS-75N STAGE II AND III SWITCHGEAR EQUIPMENT RISER DIAGRAM

No.	Date	Revision	Approved

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

LEAHY/FISCHER	LEAHY	A.S.
Designed by	Drawn by	Checked by

Date 5-1-95 Scale AS NOTED
Contract Number: WTC 802.071 Drawing Number: E-39